

ABSTRACT OF THE DISCLOSURE

The present invention relates a gas concentration detecting apparatus capable of appropriately making a decision on activation of each of a pump cell, a monitor cell and a sensor cell of its gas concentration sensor. In the apparatus, a control circuit outputs an oxygen concentration value on the basis of a current flowing when a voltage is applied to the pump cell and outputs an NO_x concentration value on the basis of a current flowing at the voltage application to the sensor cell. Moreover, the control circuit separately makes a decision on activation of the pump cell and a decision on activation of the sensor cell in the middle of the activation of the sensor. Still moreover, the control circuit makes the decision on the activation of the sensor cell after the activation of the pump cell reaches completion.